ANNUAL WATER QUALITY REPORT

Water testing performed in 2008

FORT HOOD DPW

PWS ID#: 0140107

Este informe incluye información importante sobre el agua potable. Si usted tiene preguntas o comentarios sobre este informe en español, favor de llamar al telefono 287-8713 para hablar con una persona que hable español.

Meeting the Challenge

The Fort Hood Directorate of Public Works is once again proud to present to you our annual water quality report. This edition covers all testing completed from January 1 through December 31, 2008. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal drinking water standards. As new challenges to drinking water safety emerged, we remained vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. Also note that on January 9, 2009, the 3 water systems on Fort Hood that were previously owned and operated by the Army were sold to American Water O&M, Inc. They are the current owner and operator of the water systems serving South, West and North Fort Hood, as well as Belton Lake Outdoor Recreation Area (BLORA).

Please share with us your thoughts about the information in this report. After all, well-informed customers are our best allies.

"WELL-INFORMED CUSTOMERS ARE OUR BEST ALLIES."

Important Health Information

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Public Participation Opportunities

Date: August 5, 2009

Time: 1:00–2:00 p.m.

Location: Bldg. 4633, Engineer Drive

Phone Number: (254) 286-6499

Water Sources

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

Questions?

Margaret Brewster of the Public Affairs Office, (254) 287-4003, is the Fort Hood point of contact for questions regarding this report or to request to schedule a public meeting.

This report is also available on the DPW Web site at http://www.dpw.hood.army.mil/Environmental/Files/2008_Annual_CCR.pdf.

Lead and Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Fort Hood is responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Where Does My Water Come From?

Our drinking water is obtained from a surface water source, Belton Lake. Fort Hood purchases treated drinking water for South and West Fort Hood and BLORA from Bell County Water Control and Improvement District No. 1 (BCWCID1). A Source Water Susceptibility Assessment for Belton Lake has been updated by the Texas Commission on Environmental Quality (TCEQ) and is available at their Austin office. The report will describe the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment will allow BCWCID1 to focus our source water protection strategies. For more information on source water assessments and protection efforts at our system, please contact us.

Water Conservation

You can play a role in conserving water and saving Fort Hood money in the process by becoming conscious of the amount of water you are using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use about 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to full capacity.
- Turn off the tap when brushing your teeth.
- Check faucets in your home and at work for leaks. Just a slow drip can waste 15 to 20 gallons a day. If it's fixed you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. If it's fixed, you can save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

ALL drinking water may contain contaminants

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

Secondary Constituents

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not the EPA. These constituents are not causes for health concern. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

Cryptosporidium Monitoring Information

Cryptosporidium is a microbial pathogen that may be found in water contaminated by feces. Although filtration removes *Cryptosporidium*, it cannot guarantee 100 percent removal, nor can the testing methods determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea, and abdominal cramps that may occur after ingestion of contaminated water.

BCWCID1 completed its compliance schedule, meeting the requirements of the Long Term 2 (LT2) Enhanced Surface Water Treatment Rule. Monitoring for *Cryptosporidium* and *E. coli* began in October 2006 and ended in September 2008. After 48 samples, no microbial pathogens were found.

About the Data Tables

The tables that follow list all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

The state allows us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AVERAGE LEVEL	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Atrazine (ppb)	2008	3	3	0.04	ND–0.13	No	Runoff from herbicide used on row crops
Barium (ppm)	2008	2	2	0.063	0.061–0.066	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Gross Beta Emitters[1] (pCi/L)	2006	50	0	3.55	2.8-4.3	No	Decay of natural and man-made deposits
Chloramines (ppm)	2008	[4]	[<4]	2.05	0.3–6.0	No	Disinfectant used to control microbes
Fluoride (ppm)	2008	4	4	0.15	0.14–0.16	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2008	60	NA	10.7	3.4–17.9	No	By-product of drinking water disinfection
Nitrate (ppm)	2008	10	10	0.22	0.17–0.24	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2008	80	NA	67.1	13.1–128.6	No	By-product of drinking water disinfection
Turbidity (Lowest monthly percent of samples meeting limit)	2008	TT	NA	100.00	NA	No	Soil runoff

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AVERAGE LEVEL (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Lead (ppb)	2007	15	0	4.6	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY AND OTHER CONSTITUENTS NOT REGULATED[2]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SECONDARY MCL	MCLG	AVERAGE LEVEL	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Bicarbonate (ppm)	2008	NA	NA	181	165–190	NA	Corrosion of carbonate rocks such as limestone
Bromodichloromethane (ppb)	2008	NA	NA	10.1	4.4–14.0	NA	By-product of drinking water disinfection
Bromoform (ppb)	2008	NA	NA	0.9	ND–1.4	NA	By-product of drinking water disinfection
Calcium (ppm)	2008	NA	NA	52.4	49.6–53.9	NA	Abundant naturally occurring element
Chloride (ppm)	2008	300	NA	34	33–35	No	Runoff/leaching from natural deposits
Chloroform (ppb)	2008	NA	NA	8.2	1.7–28.0	NA	By-product of drinking water disinfection
Copper (ppm)	2008	1.0	NA	0.001	ND–0.003	No	Corrosion of household plumbing systems; Erosion of natural deposits
Dibromochloromethane (ppb)	2008	NA	NA	6.7	2.5–9.7	NA	By-product of drinking water disinfection
Hardness as Ca/Mg (ppm)	2004	NA	NA	136	134-139	NA	Naturally occurring calcium and magnesium
Magnesium (ppm)	2008	NA	NA	10.5	10.3–10.8	NA	Abundant naturally occurring element
Manganese (ppm)	2008	0.05	NA	0.002	0.0016-0.0025	No	Abundant naturally occurring element
Nickel (ppm)	2008	NA	NA	0.002	0.002–0.002	NA	Erosion of natural deposits
pH (Units)	2008	>7.0	NA	7.9	7.8–8.2	No	Measure of corrosivity of water
Sodium (ppm)	2008	NA	NA	15.8	15.4–16.7	NA	Erosion of natural deposits; By-product of oil field activity
Sulfate (ppm)	2008	300	NA	21	21–22	No	Naturally occurring; Common industrial by-product; By-product of oil field activity
Total Alkalinity as CaCO3 (ppm)	2008	NA	NA	149	135–156	NA	Naturally occurring soluble mineral salts
Total Dissolved Solids [TDS] (ppm)	2008	1000	NA	255	149–266	No	Total dissolved mineral constituents in water
Total Hardness as CaCO3 (ppm)	2008	NA	NA	174	168-177	No	Naturally occurring calcium
Zinc (ppm)	2008	NA	NA	0.002	0-0.005	No	Moderately abundant naturally occurring element; used in the metal industry

[1] The MCL for beta particles is 4 mrem/year. The U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.

[2] Unregulated contaminants are those for which the U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

TOTAL COLIFORM

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

YEAR	CONTAMINANT	HIGHEST MONTHLY % OF POSITIVE SAMPLES	MCL	UNIT OF MEASURE	SOURCE OF CONTAMINANT
2008	Total Coliform Bacteria	4	*	Presence	Naturally present in the environment

* Presence of coliform bacteria in 5% or more of the monthly samples. (Fecal coliform bacteria were not detected)

FECAL COLIFORM REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

TURBIDITY

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

YEAR	CONTAMINANT	HIGHEST SINGLE MEASUREMENT	LOWEST MONTHLY % OF SAMPLES MEETING LIMITS	TURBIDITY LIMITS	UNIT OF MEASURE	SOURCE OF CONTAMINANT
2008	Turbidity	0.3	100.0	0.3	NTU	Soil Runoff

Definitions

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

MCL (Maximum Contaminant Level): The highest permissible level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.